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DMF NEWS

Volume 20 Second Quarter April - June 2000

DMF survey identifies juvenile cod habitat

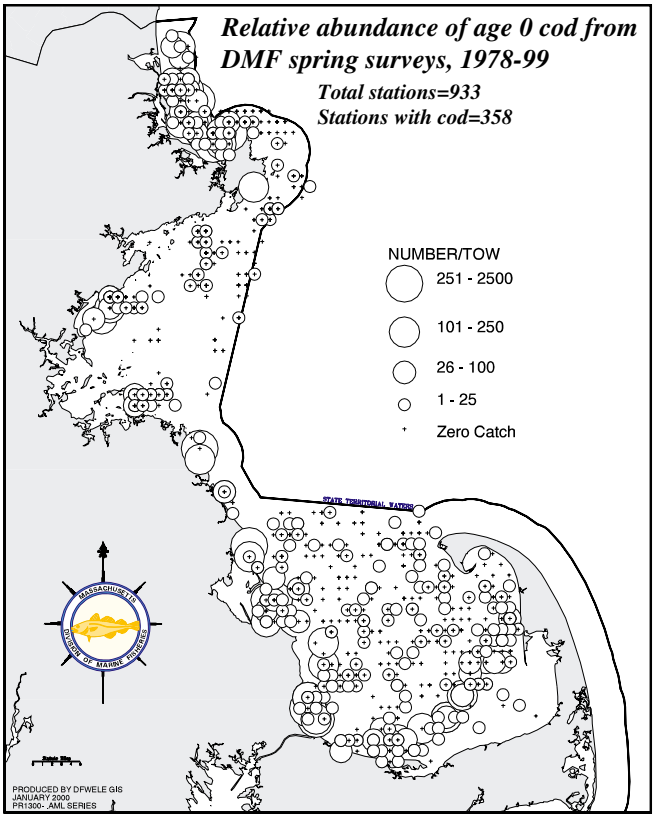
DMF's Resource Assessment Project has played a prominent role in the New England Fishery Management Council decision to protect juvenile cod. DMF's work was the basis for a recommendation to the National Marine Fisheries Service that a Habitat Area of Particular Concern (HAPC) for the Gulf of Maine cod stock be established. This zone extends from the shore at mean low water out to a depth of 30' extending in all Council-defined essential fish habitat from the U.S./Canada border to Provincetown. Most of the perimeter of the Gulf of Maine is considered by the Council to be essential habitat for cod, and now, with HAPC designation, this inshore area potentially can be afforded a higher standard of awareness, protection, and consultation between federal and state agencies to minimize impacts to "critical" habitat for newly settled cod. A possible consequence: improved survival of juveniles and perhaps improved recruitment to the fishery.

Twenty-two years (1978-1999) of semiannual inshore research trawl survey data of ages 0 and 1 cod from Massachusetts waters provided direct evidence that eastern Massachusetts coastal embayments annually serve as settlement areas and nurseries for juvenile Atlantic cod. DMF's survey catch records have linked cod productivity and nearshore habitats in southwestern Gulf of Maine. In particular, the distribution of moderate to high age 0 densities (1-10 cm fish in the spring and 1-15 cm in the fall) indicated areas of higher cod productivity and suggested preferred habitat for cod. Smaller, younger cod occupied shallower depths and moved to deeper water as they grew in size and age. This observation is consistent with the distribution of age 1 and older juveniles taken in Northeast Fisheries Science Center trawl surveys in deeper waters.

In the southwestern Gulf of Maine, two historical cod spawning grounds (Ipswich Bay and Plymouth) straddle the Massachusetts territorial seas limit and are still occupied by breeding adults. The prevailing southwestward-flowing coastal current and summer winds off eastern Massachusetts move eggs and larvae shoreward. Bottom-water drift next to the coast tends to flow directly onshore and along with tidal currents moves pelagic juveniles into Massachusetts coastal embayments. DMF's seasonal trawl catches of settled age 0 cod documents the shoreward transport and settling of pelagic juveniles. In spring, much of this inshore habitat occupied by these cod is complex bottom, such as seagrass beds, cobble/gravel areas, and rock reef, all enhancing the survival of very young juveniles.

The above excerpts and conclusions were made by DMF's researchers Arnold Howe, Steven Correia, Thomas Currier, Jeremy King, and Robert Johnston in their draft manuscript "Spatial distribution of ages 0 and 1 Atlantic cod (Gadus morhua) off eastern Massachusetts coast, 1978-1999, relative to 'Habitat Area of Particular Concern'." They end their paper with the following advice:

"…Ultimately, if HAPCs are to fulfill expectations, managers and fishermen must embrace an ecosystem-based philosophy where exploitation would be balanced against the need to maintain long-term sustainability of renewable resources and other goals. Minimizing impacts on critical



benthic niches will have positive effects on cod productivity, benthic habitats, and biodiversity (including positive effects on pre-recruit lobster and young-of-the-year groundfish, such as winter flounder).

At the same time, resource users are demanding more balanced approaches than simply closing expansive areas to all bottom-fishing methods. Presented with harsh economic alternatives, they will help develop fishing technologies less destructive to bottom habitat. Using low-impact harvesting methods in sensitive habitat may lead to greater habitat complexity and correspondingly greater settlement and survival of newly settled cod. Of course, affording more protection to nursery habitats alone does not assure enhanced recruitment since New England's coastal regions depend on replenishment from Gulf of Maine adult spawning aggregations which are currently at record lows."

Clearly, the cod challenge for the New England Council is twofold – continue its efforts to rebuild Gulf of Maine cod spawning stock and use every means available to protect habitat critical for juvenile cod survival and recruitment.

by David E. Pierce, Ph.D. (David.Pierce@state.ma.us)
Acting Assistant Director

Year 2000 Sportfish Program Guide & Circle-Hook Brochure

DMF's Sport Fisheries Program has produced the 2000 "Massachusetts Saltwater Fishing Guide." As in previous years, the guide contains current information on boat-launch sites, tackle shops, charter and party boats, fish profiles, and fishing tournaments to assist you in enjoying our spectacular array of fishing opportunities from shore or by boat.

The guide is arranged geographically starting from Salisbury (NH border) following the coastline south and west to the towns of Swansea and Somerset along Mount Hope Bay. The guide then takes you east to Cape Cod and the Islands. Look for the coastal map centerfold for orientation.

A copy of the guide can be obtained at most bait and tackle shops, or at one of the field offices. Call our Boston office at (617-626-1520).

Also, DMF's new circle-hook promotional brochure is available at most tackle stores. DMF is promoting the use of circle-hooks to reduce release mortality of striped bass and other large fish. All anglers are urged to try circle hooks this summer when using live bait or "chunks."

Responsible Fishing: DMF's gear expert & NE fishermen go global

Responsible fishing is an issue that continues to gain importance in global and local fisheries. Commercial fishermen and fishery managers are both pushing for improving fishing practices and acknowledging the increase in the acceptance among industry members.

Four New England fishermen and a Massachusetts DMF biologist were invited to the North Atlantic Responsible Fishing Conference held this spring. The conference site was Fraserburgh, Scotland. Fraserburgh is a North Sea port that has the highest landings of Nephrops, a lobster-like crustacean important to European restaurants. A short distance from Fraserburgh is Petershead, which is the North Sea's first port for whitefish landings. The conference was sponsored by the Scottish Whitefish Authority and the Department of Fisheries and Oceans of Canada.

Russell Sherman of Gloucester, Bill Amaru of Orleans, David Goethel of Hampton, N.H., and Trevor Daley of Narragansett, R.I., along with Arne Carr of DMF, were participants in the conference. They each returned with thoughts that the conference was a means of constructive exchange for responsible conservation methods of harvesting fish and provided a forum to consider other ideas and techniques to promote responsible fishing.

The focus of the conference was on working groups that discussed four topics:

-bring fishermen together to share knowledge of responsible fishing methods

-consider industry education and training programs in responsible fishing methods

-develop communication strategies to promote responsible fishing

-initiate collaborative responsible fishing projects and related training outcomes

"Active participation was shared by all attending. Some of our group accepted assignments to lead working group discussions," said Arne Carr. The international momentum will continue at an upcoming conference scheduled for later this year in Newfoundland. A proceeding of the conference will be made available; this will contain conclusions and recommendations of the working groups.

For more information contact Arne Carr at DMF's South Shore office or at arne.carr@state.ma.us.

Trans-Atlantic exchange: NE fishermen Dave Goethel (left) and Russell Sherman (second from right) discuss fisheries issues with a Canadian colleague and a fish buyer at the Petershead Auction. DMF Photo by Arne Carr

Strong river herring runs reported for Spring 2000

For close to ten millennia the alewife (*Alosa pseudo-harengus)* and the blueback herring *(Alosa aestivalis)* have made their annual spring journey from the cold waters of the western North Atlantic to the warming flows of their natal Commonwealth streams and ponds. Known as river herring throughout the region, they represent the most abundant anadromous fish species in Massachusetts.

Each spring as the water temperature approaches 50 º to 52 º F for the alewife and 57º to 59º F for bluebacks, these stalwart travelers are driven by that irresistible urge to reproduce and continue the important chain of life. These species mature generally between the ages of 3 to 5 for the males and 4 to 6 for the females.

Massachusetts with its spectacular coastline and plethora of coastal streams is fortunate to support more than 100 river herring runs, hosting the largest number of active runs of any of the New England states.

Collected by nets and baskets, weirs and spears these silvery fish, which average about 10 inches long and weigh 6 to 8 ounces, were harvested by the thousands and tens of thousands through out the early years of this Commonwealth. Salted and pickled, smoked and fried these bony but edible fish were a major source of income to many a coastal town's local and regional spring economies. Today's harvesting methods are restricted to hook and line and hand held dip-net only.

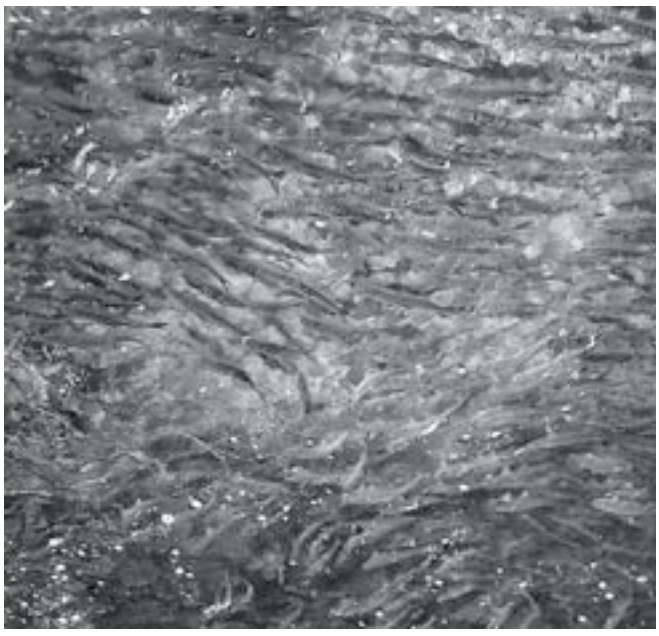
These harbingers of spring, when the lilacs and shad bush bloom, represented the first large readily available source of energy-rich protein that the Native Americans and colonial pilgrims had access to, helping to break the grip of a long winter fast. From the Colonial period through the early 20th century construction of dams, industrial pollution, loss of water quality and over fishing reduced their vast numbers to remnants in many of the historic spawning areas.

River herring are known as an anadromous species, which means they spend their adult life in the ocean, but must come into fresh water areas to reproduce. Like many other broadcast spawners, they are very fecund. Females are capable of producing 60,000 to 300,000 eggs each year with an average mature female releasing 125,000 to 150,000 eggs while on the spawning run. Unlike the more famous Pacific salmon of the West Coast, river herring do not die following their spawning season. Some may return to their spawning grounds an additional four or five times. With such a reproductive strategy it is not surprising that herring populations can evidence large swings in their population numbers, reflecting the success or failure of each season's spawning production.

This type of fluctuation has been documented in several coastal systems. The Monument Rivers' estimated herring population has ranged from a low of 91,000 to a high of 536,000 averaging 262,000 over the last two decades. A final estimate for this year is not yet complete; however, preliminary figures indicate that the spring 2000 run will be more than 100,000 fish greater than last year's, and 50,000 or more above the historical average. Another south coastal system reporting an increase in returning herring is the Mattapoisett River with this years count up by as many as 23,000 fish over 1999.

From almost all sources of information - both anecdotal and technological (DMF's in-stream electronic fish counters) - the assessment is positive for this spring's runs. From some of the smallest runs to the largest, reports abound of abundant returns witnessed by interested and casual observers alike. Runs which were more closely scrutinized evidenced their largest or near largest adult returns in recent years.

Text and Photos By Phillips Brady



Quota management rules complicate business plans of inshore commercial fishermen

Inshore fleet challenged by the combination of high catches and low quotas designed to accelerate rebuilding.

Commentary by Dan McKiernan, DMF News editor and fishery management specialist

By early summer most inshore fisheries usually hit their peak. Scup, sea bass, fluke, tautog, and striped bass all migrate nearshore and for decades - in some cases centuries - have been the targets of commercial fisheries. Fishing fleets and whole communities were established based on the seasonal availability of certain species migrating inshore from offshore wintering areas. Inshore fisheries developed naturally as fishermen learned to capitalize on whatever species were available. When schools migrated away or became depleted, fishermen scaled back or shifted their focus to other species.

Not this year. Over the last few years, NMFS and ASMFC have crafted single-species regional management plans. State regulations layered over this array of interstate and federal management regulations have frustrated and confused many of the Commonwealth's inshore commercial fishermen. The "closures" for many species are now much longer than the openings. In June, most single-species fisheries were closed. A result of this single-species approach has been a confusing maze of rules that fishermen struggle to understand and DMF's staff struggles to explain.

The DMF staff has been flooded with phone calls this spring from fishermen seeking answers about the rules and hoping to plan their business activities. Typical questions were: "What's open? What's closed? What's the trip limit? Is there a by-catch allowance? For what gear? What permits do I need? Should I give up my federal permit to fish in state waters? Can I even get that state permit?" However, one reason the rules are so complicated is fishery managers are bending over backward to make the rules work for everyone.

A fisherman called me and noted he was "forced" to take a first-ever late-June vacation with his family. In past years he could never afford to take time off from fishing at the peak of the season. Now he was forced to.

One fish buyer willing to pass the word along to fishermen called for explanations about the most recent closure - 22-days (June 9 through June 30) for commercial black sea bass harvest. He politely noted that DMF now has 5 "opening days" in July: July 1 for sea bass; July 3 for striped bass; July 5 for summer flounder; July 11 for tautog; and July 17 for scup. The single-species opening dates don't accommodate fishermen whose gear often catch many species.

In contrast to my conversation with this fish buyer, some fish potters, who were hit with spring closures for scup and sea bass that they did not expect, were not so polite. They claimed to have seen unprecedented levels of scup and sea bass during May and the first week of June. "The bottom's paved with'em," one fishermen said. He and others objected to DMF's liberal sea bass trip limit (2,000 lbs.) that allowed the federally managed quota to be filled and caused the premature three-week closure. With only two days notice,

Unloading fluke in Vineyard Haven. The stock is growing but the quotas are static. Most draggers are home before noon with their 300 lbs. limit. Last year's directed fishery lasted just over one month. Photo by Dan McKiernan

fishermen were forced to either bring their pots home or just open the doors of the traps for 22 days before the 2,000 lbs. trip limit resumed. Ironically, ASMFC and the Mid-Atlantic Council have ignored DMF's past requests to reduce the 3,000 lb. trip to a lower level to prevent closures.

I explained to fishermen and dealers that all these quotas, trip limits, and closures are to prevent overfishing. The plans' overarching goal is to rebuild spawning stock biomass among many age groups to enhance the production of strong year classes. One reason catches are up this spring is closures levied on the large-vessel fleet fishing on offshore wintering grounds. Fish not taken last winter are still alive this spring. It's that simple. But it's a tough sell to fishermen who are seeing their highest catches in a generation.

When those frustrated fishermen remained on the line long enough, I explained that the near future (as I see it) will have more of the same. Necessary, tough federal law continues to require fishery managers to constrain catches and rebuild overfished stocks to levels many young fishermen have never seen. As fish stocks grow, quotas are kept low to accelerate rebuilding.

Consider the example of the Massachusetts summer flounder quota. If unconstrained, the commercial fleet could probably fill our 550,000 lb. quota for the summer/fall in about 2 weeks! So, to more equitably allocate the landings between seasons and fishermen, DMF trip limits constrain draggers to just 300 lbs./day and hand-liners to 200 lbs./day beginning July 5. Since the plan was implemented seven years ago, catch rates have increased fourfold. But with no increase in the commercial quota, the 300 lb. trip limit is being reached four times faster.

Last year, DMF's at-sea observers noted the fleet was reaching its daily limit in just over two hours of towing! Last

summer, many commercial fishermen coordinated some voluntary no-fishing days each week to extend the fishery another two weeks, eliminate market gluts, and increase ex-vessel price. Local fishermen are incredulous over news of a recent federal court decision that ruled NMFS erred when approving the 2000 fluke quotas, and NMFS will be forced to lower the states' quotas for 2000 in the weeks ahead.

So what's the solution? For 2001, DMF will work with federal and interstate managers to amend the rules to avoid disruptive closures if possible. We will try to better forecast closures, but fishermen will have to better prepare for them. NMFS' web site carries weekly reports that fishermen can use to anticipate closures.

The good news is there is measurable and substantial recovery for many species. The bad news for commercial fishermen is the disruption of traditional fishing seasons and practices is here to stay until the stocks are rebuilt to federally-mandated standards. Fishermen need to accept the reality of high catches, low quotas, and possible unexpected closures in their annual business planning.

Fluke fishery quota to be cut

by David E. Pierce, Ph.D. Acting Assistant Director

Appeals Court Judges Edwards, Henderson, and Buckley reversed the U.S. District Court for the District of Columbia judgment and remanded the case to the National Marine Fisheries Service for further proceedings. The plaintiffs, including the National Resources Defense Council and other environmental organizations, had argued last year, that the 1999 summer flounder quota did not provide sufficient assurance that the summer flounder quota would meet the conservation goals of the Magnuson-Stevens Fishery Conservation and Management Act. The defendant (Secretary of Commence) prevailed, but now has lost on appeal.

In its May 24 release, NMFS announced that it intends to revise the year 2000 summer flounder quota by August 1 to a level with at least a 50% chance of not exceeding the Mid-Atlantic Council and ASMFC fishing mortality rate target. The Appeals Court specifically criticized NMFS for implementing a 1999 quota that was "unreasonable, plain and simple." The Appeals Court went so far as to conclude*: "The disputed TAL [total allowable landings] had at most an 18% likelihood of achieving the target F. Viewed differently, it had at least an 82% chance of resulting in an F greater than the target F. Only in Superman Comics' Bizarro world, where reality is turned upside down, could the Service reasonably conclude that a measure that is at least four times as likely to fail as to succeed offers a 'fairly high level of confidence'."*

Why did the Mid-Atlantic Council and ASMFC adopt a 1999 TAL with such a low probability of success? As a participant in that TAL-setting process, I can explain. The Council and ASMFC chose the 18,514,000 million lbs. TAL over a lower TAL (14,987,000 lbs.) because the lower TAL would have resulted in a substantial reduction of 3.5 million lbs. in landings for both the recreational and commercial sectors split with a 40:60 ratio. However the commensurate gains in spawning stock biomass were considered relatively small.

Furthermore, all states agreed to set aside 15% of state allocations for commercial fisheries as allowable by-catch landings (fluke caught in other fisheries). Council/ASMFC logic was to try this approach to convert some discards into landings thereby reducing mortality. Directed fisheries would be reduced to account for bycatch. The logic was sound. Nevertheless, the Appeals Court's decision was influenced by the fact that the 15% set-aside involved voluntary action by the states. It was not mandatory. Also, according to the Court, "nothing on the record indicated that this voluntary action would improve the level of confidence so as to assure a reasonable likelihood of achieving the target F."

We now await the NMFS decision. Potentially, the TAL could be cut this year from about 18.5 million lbs. to 16.8 million lbs. providing a 50% chance of achieving the target TAL. The commercial quota for all states would decrease from about 11.1 million lbs. to 10.1 million lbs. NMFS could reset the 1999 TAL and then deduct the resulting overage from the now reduced 2000 TAL. This would result in a 2000 commercial quota drop from about 11.1 million lbs. to 8.2 million lbs.

The consequence to commercial fishermen landing fluke in Massachusetts would be substantial. Massachusetts would lose 153,000 lbs. of its year 2000 711,000 lbs. state quota, 6.8% of the national quota. Since about 140,000 lbs. has been landed through June 10, inshore fishermen had anticipated a summer fishery of 571,000 lbs. They would lose 27% of the remaining quota if NMFS takes the expected action, leaving just 418,000 lbs. for the remainder of the year.

Our summer directed fishery for fluke begins on July 5 with a 300 lbs. limit for trawlers and longliners, and a 200 lbs. limit for hook fishermen. The summer season could be shortened to about 3-4 weeks.

We're hopeful that NMFS and the plaintiffs can agree to a reasonable approach for 2000. If NMFS reduces the TAL by August 1 to account for a so-called 1999 "overage" created by the Court's decision, commercial fishermen landing in Massachusetts will find themselves facing a premature closure of their long-awaited summer fishery. Our state's fluke commercial fishermen already have a small percent share of the annual quota.

Unresolved for this year will be what to do with the fluke recreational fishery. The Appeals Court decision potentially will reduce the recreational fishery target catch from about 7.4 million lbs. to 6.7 million lbs. The fluke recreational fishery is regulated by fish minimum size, closed seasons, and bag limits.

Stay tuned for the NMFS decision and DMF's response. This summer's fluke season is bound to be changed. The extent of that change has yet to be decided.

Massachusetts lobstermen, state officials & IFAW tackle ghost gear problem

Cape Cod fisherman Gary Ostrom provided much of the energy behind the Critical Habitat "cleanup." Lost or abandoned gear was found scattered around Cape Cod Bay by five different lobstermen in this coordinated effort. Photos by Dan McKiernan

A few Cape Cod Bay lobstermen did some "clean-up" of Right Whale Critical Habitat in late-April and early-May. Funded by the International Fund for Animal Welfare (IFAW) and overseen by state biologists and environmental police, lobstermen retrieved hundreds of traps with vertical buoy lines that were lost or abandoned.

Cape Cod Bay is relatively gear-free during winter-spring. The total lobster pots in the Bay drops from about 80,000 in summer months to a thousand or more in winter when right whales take up residence. Though gillnetters are prohibited during January 1 - May 15, lobster pots are allowed as long as buoy lines are rigged with a 500-lb. breakaway; lines between pots (ground-line) are sinking line; and pots are set in multiple pot strings to reduce buoy lines.

"Ghost gear" is a familiar term along the waterfront describing untended or lost fishing gear that continues to fish. Passive gear such as gillnets and lobster traps will capture fish and crustaceans as long as gear remains intact. Fishermen fear ghost gear can potentially entangle whales. They fear closures or additional restrictions if a whale ever suffers serious injury in lost or abandoned gear.

DMF's regulations were carefully crafted to allow lost or abandoned gear to be identified. All gear that is set in the Critical Habitat must comply with seasonal regulations and be flagged with "twin orange markers." These flag-like strips are mandated in addition to other gear-marking requirements. Any gear not bearing these winter-time marks can be assumed to be non-compliant and abandoned.

The gear removal program was organized by lobstermen and state officials to remove all non-compliant gear from the Bay. IFAW pledged up to $12,000 to local fishermen to pay for their vessel and time to haul, remove, and deliver gear to a storage site with state oversight.

The Bay was divided up into zones and local fishermen were assigned to patrol the area they normally fish. The program capitalized on fishermen's local knowledge of gear and fishing locations. Most of the gear hauled was returned to its owners. Only when owners could not be identified or if gear was found in violation of other lobster conservation rules (e.g. trap tags, vent size) was the gear secured and stored for further investigations. State Environmental Police were assigned to each vessel since it is unlawful for anyone to tamper with or seize another fishermen's gear.

The Cape Cod Bay ghost gear removal project focused on removing all lost or abandoned traps and lines from the water. This past winter researchers monitoring Cape Cod Bay observed right whales in the presence of fixed gear. DMF and state environmental police investigated the gear on numerous days and found three types of non-compliant gear: lost traps, abandoned traps, and non-compliant gear that fishermen knowingly left in the water and occasionally fished them. Lost traps were the classic "ghost gear" laden with months of biological growth on the buoy, line, and trap.

When fishermen were contacted about the gear, they were unaware the gear was still in the water. They had presumed the traps were lost to storms, draggers, or stolen. Most of these lost traps were scattered with just one or a few traps attributable to each fisherman identified. "Abandoned" gear was identified in two cases where fishermen could not remove their gear from the water (or modify it) before January 1 due to health or personal reasons. In these cases hundreds of pots were left in clusters by the fishermen.

Finally, some non-compliant gear was seen in deep portions of Cape Cod Bay and some of this gear appeared to be occasionally fished. Some may have been in "winter storage." Many fishermen reported they were not aware or confused about current rules.

This "pilot" program was a success. Next January, state officials and lobstermen will set out again to remove any lost, abandoned, and otherwise non-compliant gear from the Bay to avoid an entanglement. This partnership of lobstermen and state officials allows the job to be completed quickly because the state is not well-equipped to haul fixed gear. DMF hopes the Bay can be free of non-compliant gear next winter by January 15, 2001.

By Dan McKiernan

Environmental Police Sgt. Bill Gray (left) and other officers accompanied each "cleanup" trip and inspected all gear for compliance. Gary Ostrom (right) with some of the retrieved gear. Most gear was returned to its owners.

ASMFC Peer Review Report delivered on lobster stock assessment

Current stock levels high but stricter management urged

The ASMFC American Lobster Stock Assessment Peer Review report was completed and presented to the ASMFC Lobster Management Board at the spring ASMFC meeting in Portland, Maine on June 6, 2000. The report evaluated the recent stock assessment conducted by the ASMFC American Lobster Technical Committee. The Peer Review Panel, composed of lobster assessment scientists from the U.S. and Canada validated much of the stock assessment and also suggested means to improve procedures and results.

The Panel concurred that the American lobster resource and fishery have experienced high abundance and catches in recent years due to increasing or stable recruitment in the three stock units, but asserted that this condition will logically not persist indefinitely. These improvements have occurred amidst record increases in fishing effort in recent years and, thus are likely the result of temporary favorable environmental/ecological conditions for the production and/or survival of larval or postlarval lobsters. The Panel believed that these favorable conditions may have improved survival of early life history stages and possibly produced higher growth rates for all stages. However, they recognized various viewpoints and a lack of consensus on those factors which control recruitment and population dynamics.

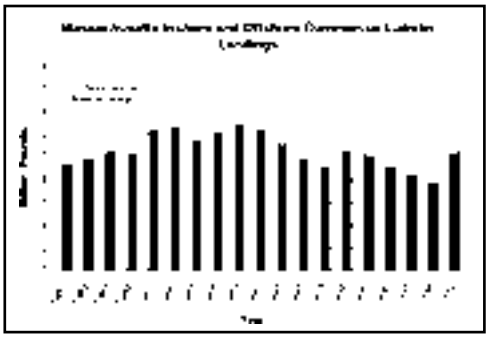
The Peer Review Panel expressed concern for the future of the lobster resource because overall stock unit trends tend to mask areas of localized depletion in inshore areas such as Massachusetts Bay where landings declined significantly during most of the 1990s and in Long Island Sound where recent die-offs have impacted the industry. **Calculated fishing mortality rates are unacceptably high in all three stock areas and truncated length-frequency distributions portray a reliance on the first molt group above legal size. This condition has existed for at least two decades. Evidence of a shift in fishing effort from inshore to offshore fishing grounds has occurred and may jeopardize inshore abundance if a dependence upon supplementary offshore egg production exists.**

Conclusions of the Peer Review differed from the stock assessment in that the Panel believed that recruitment overfishing has been occurring for some time, and eggs produced per recruit have been low. The Panel cautioned that it is unrealistic to expect strong recruitment to continue indefinitely. A decline in recruitment will result in less egg production since new recruits are now supplying most of the egg production. Also, it was clear to the Panel that available large lobsters cannot be expected to indefinitely maintain adequate egg production (as in maximum size protection) unless smaller lobsters are allowed to grow to larger sizes. Intense fishing prevents most recruits from growing beyond the first molt group. This is known as growth overfishing which reduces yield to the industry and minimizes the benefits of maximum size regulations.

The Panel asserted that it is not prudent to assume that reduced egg production will have no consequences and recommended increasing the minimum size, increasing the size of the escape vent, or decreasing the fishing mortality rate which would also increase yield per recruit and mitigate recruitment and growth overfishing. For more information visit the ASMFC website at : www.asmfc.org

By Bruce Estrella

Lobster landings over the past two decades have been steady but scientists are warning managers that the fishery is increasingly dependent on offshore grounds.



We discovered this old 1948 photo during the Boston office move. While the basics of lobstering remain the same, this picture reminded us of changes seen in the last 52 years. Most wooden boats have been replaced by fiberglass; wooden traps replaced by coated wire, and barrels and baskets are now exclusively plastic. Also, note the wooden lobster buoy and claw pegs. Most modern commercial lobstermen deploy multiple pot strings and rely on electronics unavailable to fishermen in 1948.

DMF's Boston Headquarters is on the Move!

DMF's Boston Office staff moved out of the Leverett Saltonstall Building at 100 Cambridge St. This move was part of the relocation of all Environmental Affairs Departments. By this fall, nearly all the EOEA Departments will be reassembled at a new facility at 251 Causeway Street - a short walk from the Fleet Center. All current phone numbers and fax numbers will be maintained during the interim and final moves.

However during the summer months the Marine Fisheries Boston staff will be temporarily assigned to various field stations or other offices in Boston. During this interim move, DMF will maintain the same general phone line and fax number.

Individual staff member's phone numbers will still be active. DMF's main number (617-626-1520) and fax number (617-626-1509) remain unchanged and the public can continue to use these numbers to reach DMF.

Main Office:
Division of Marine Fisheries
251 Causeway Street
Boston, MA 02114
(617) 626-1520, fax: (617) 626-1509

Licensing Office:
DFWELE SPORT Licensing
175 Portland Street, 2nd Floor
Boston, MA 02114
(617)727-3900, fax: (617)727-8897

Field Stations:

Annisquam River Marine Fisheries Station
30 Emerson Avenue
Gloucester, MA 01930
(978)282-0308
fax: (617)727-3337

Shellfish Purification Plant
84 82nd Street
Newburyport, MA 01950-4323
(978)465-3553
fax: (978)465-5947

Southeast Marine Fisheries Station
50A Portside Drive
Pocasset, MA 02559
(508)563-1779
fax: (508)563-5482

Martha's Vineyard Marine Fisheries Station
P.O. Box 9
Vineyard Haven, MA 02568
(508)693-0060

After nearly four decades , the Saltonstall building (above) is now vacated for reconstruction. DMF and the other state environmental agencies that have been moved to interim locations will be reassembled by fall at 251 Causeway Street

Photos by Dan McKiernan

DMF *Rules UPDATE*

Public Hearings • Regulations • Legislation

Notice of Public Hearings

Scheduled for July 18, 19 & 20, 2000

Please note early (6:30 p.m. and 5:00 p.m.) starting times

Under the provisions of G.L. C. 30A and pursuant to the authority found in G.L. 130 ss. 17A, 80, 100A, and 104, the Division of Marine Fisheries (DMF) and the Marine Fisheries Commission (MFC) have scheduled hearings on the following proposals. Contact the Division of Marine Fisheries for draft regulations and further details.

The following items are proposed regulation changes presented for public comment. After public hearings, the Commission and DMF will consider all oral and written comments through Friday, July 21, and votes on these proposals may be taken at the Commission's August 3 business meeting or later. **If specific changes are not approved, current regulations will remain in effect.**

(1)DMF proposal to clarify the current recreational striped bass bag limit of one fish per angler. DMF's proposal would specifically prohibit the retention of live striped bass by anglers for purposes of high-grading. "High-grading" is the practice of discarding a smaller fish (previously captured and retained) in favor of a larger fish. Current regulation already prohibits discarding dead legal-sized bass.

(2)DMF proposal to enact groundfish measures, 322 CMR 8.00, to complement two seasonal federal groundfish closures: A) upper Cape Cod Bay and Mass. Bay (north of latitude 42 degrees and south of 42 degrees 30 minutes) during October-November; B) and east of Cape Cod (south of latitude 42 degrees and east of longitude 70 degrees) during May.

(3)DMF proposal to enact a small mesh exemption area for trawlers fishing for whiting in upper Cape Cod Bay, 322 CMR 8.07, during September 1 – November 20. This proposal was crafted to complement recent federal action approving the DMF sponsored raised-footrope trawl whiting fishery in upper Cape Cod Bay and adjacent federal waters. Gear specifications, catch and by-catch restrictions are proposed and are similar to those in effect during 1996-99 when DMF conducted experimental fisheries in this area and similar to those approved by the New England Council as Framework #35.

(4)DMF proposals to amend sea herring regulations (322 CMR 9:00) to comply with the new state/federal sea herring management plan. New spawning closure rules, regional quota monitoring, and reporting requirements are proposed.

(5)DMF proposal to amend regulations clarifying rules pertaining to the capture and release of egg-bearing lobsters. For purposes of enforcing Chapter 130 sections 41 and 41A as well as 322 CMR 6.02(2), fishermen releasing egg-bearing females alive to the water shall be prohibited from attaching bands on the egg-bearing lobster's claws and shall be prohibited from returning any egg-bearing females back into a trap or holding car.

(6)DMF proposals to amend certain limited entry permit transfer regulations. Recently enacted eligibility criteria as listed in 322 CMR 7.06 and 6.12 would pertain to all limited entry permit transfers except those pertaining to coastal lobster (which remains unchanged). The eligibility criteria in 6.12(3), 6.08(3)(d), 6.08(4)(c), 8.10(4), 6.22(3)(f)(4), and 7.05 would be deleted and these regulations would cite 7.06 as the prevailing eligibility criteria.

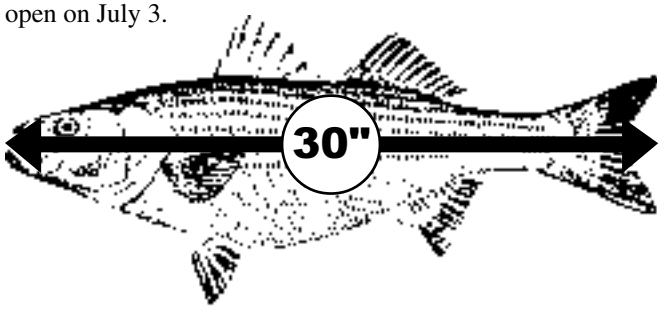
Three hearings have been scheduled:

Tuesday, July 18, 2000 at the Plymouth Library on South St. Plymouth from 6:30-9 p.m.;
Wednesday, July 19, 2000 at the Gloucester Sawyer Free Public Library from 6:30-9 p.m.;
and
Thursday July 20, 2000 at the Tisbury Senior Center on Martha's Vineyard from 5:00-7:00 p.m.

Regulatory Update

During the period February - May 2000, DMF and the Marine Fisheries Commission approved the following:

Striped Bass: Recreational minimum size was increased from 28 inches to 30 inches. Commercial fishery to open on July 3.



Spiny Dogfish commercial harvest regulations:

Massachusetts quota of 7 million lbs. regardless of where the fish were caught

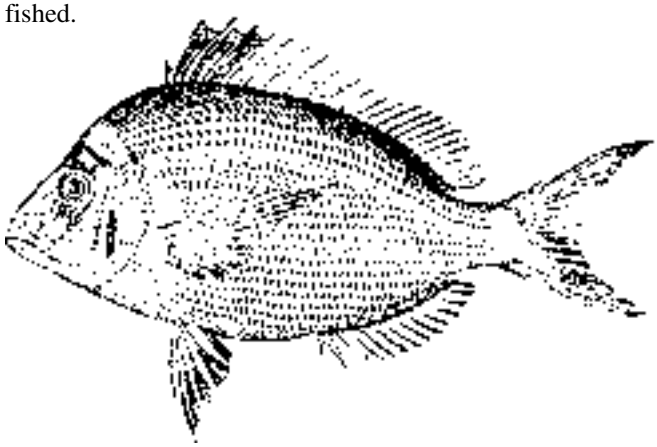
Commercial fishermen landing dogfish from state waters must obtain a DMF regulated fishery permit, and dealers purchasing dogfish must obtain DMF authorization and report their purchases to DMF.

Dogfish less than 31" (80 cm) cannot be landed.

Dogfish gillnetters are prohibited from setting their gear overnight. All gillnets must be on board and returned to the dock each day with the vessel. Fishermen who leave gillnets in the water are limited to 600 lbs., the federal trip limit for May 1 through October 31. This is a major change in state waters gillnetting since until these new regulations, dogfish caught by gillnets in Massachusetts waters have been with overnight or multi-day sets.

Only those dogfish gillnetters who can document fishing for dogfish in Massachusetts waters three out of the last five years (1995-1999) will be able to target dogfish with gillnets. Gillnetters file catch reports with DMF, and these reports will be used to determine fishing history in state waters.

Only gillnets with at least a 6 1/2" mesh opening can be fished.



No more than thirty 300-foot gillnets can be set. The maximum length of a gillnet is 2,400 feet.

Scup commercial fishing closures & trip limits

On February 15, DMF closed its ports to the landing of scup to support the federal and interstate plan's offshore fishery closure. This closure lasted through April 30.

Due to the unprecedented low inshore fishery quota approved by ASMFC: approximately 300,000 lbs. – a 40% reduction compared to MA 1999 landing, DMF enacted severe reductions in trip limits, seasons and overall fishing opportunities for 2000. These are listed by gear type and were effective May 1.

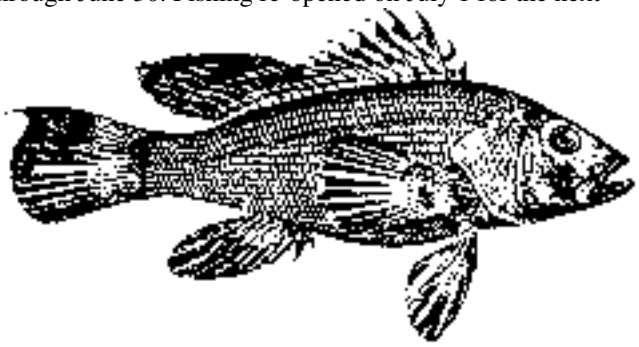
For hook-and-line fishermen and potters, landings were prohibited until July 17 and the trip limit was 200 lbs.

For weirs no daily trip limits were enacted but landings were capped at a total of 75,000 lbs. among all weir operators.

For trawlers, 100 lbs. by-catch was allowed during the squid fishery (May through June 8). Possession limit was dropped to zero from June 9 through July 16 and then increased to 200 lbs. on July 17.

Scup recreational fishing bag limit was lowered from 100 fish to 50 fish per angler with a maximum of 200 fish per vessel. Anglers aboard charter and party boats are exempt from the limit.

Sea bass commercial fishery closed from June 9 through June 30. DMF and National Marine Fisheries closed the 2000 commercial quota (738,837 lbs.) among all states for Quarter II (April – June) from Friday June 9 through June 30. Fishing re-opened on July 1 for the next



three-month quarter with a 2000 lbs. trip limit for Massachusetts fishermen.

Squid trawling season closed after June 8.

Squid trawling with small-mesh nets in Nantucket Sound, Vineyard Sound, and waters around the islands under the jurisdiction of the Commonwealth was prohibited after Thursday June 8. The season previously was extended for 8 days from June 1-8. Sea sampling - as well as reports from dealers and fishermen - showed the squid size composition shifted to predominately small squid. Preliminary reports suggest this year's inshore landings were up compared to the past few years.

Summer flounder commercial harvest regulations:

For 2000 most commercial fishing rules were unchanged. However, DMF enacted a new rule based on a public petition to allow longline fishermen to harvest 100 lbs./day during the period April 23-end of the squid trawling season. On July 5, the directed fishery for all gear types

opened with a 300 lbs. trip limit for trawlers and 200 lbs. for hook-and-liners.

Recreational rules were amended to comply with the interstate management plan: minimum size increased from 15" to 15 1/2" and the recreational season established as May 10 – October 2 (last year's season was May 29 - September 11.) Possession limit of 8 fish remains unchanged.

Eel regulations to bring Massachusetts into compliance with the interstate management plan.

Commercial harvesters required to obtain a regulated fishery permit; Permit conditions include submission of monthly catch reports;

Minimum size increased from 4" to 6";

Non-commercial (recreational) harvest limit established of fifty (50) eels for harvesters. (Note: anglers purchasing eels from bait shops for use as live bait are allowed to possess more than 50 eels for their personal use).

Dealers who purchase eels from commercial fishermen must obtain authorization from DMF and report purchases.

Horseshoe crab regulations to bring Massachusetts into compliance with the interstate management plan. The ASMFC approved a 25% reduction in commercial harvest for the Commonwealth. DMF enacted this quota and other measures including:

Prohibition on harvest during Saturdays and Sunday.

Catch reports that must be submitted monthly to DMF by all commercial harvesters.

New procedures to open and close specific areas to protect sensitive or depleted spawning areas.

"Control date" on the issuance of new permits of 2/15/2000. Any fisherman purchasing a new permit after this date could lose that permit if a formal limited entry scheme is enacted in the future. For more information contact Frank Germano at DMF's Pocasset office: 508-563-1779 ext. 123

Changes to regulations for fixed gear set in Right Whale Critical Habitat (Cape Cod Bay) To facilitate enforcement and compliance with the fixed gear regulations in Cape Cod Bay Critical Habitat, two regulations were changed on an emergency basis:

CMR 12.00 was amended to make it unlawful to "fish, store or abandon" non-compliant fixed gear in Critical Habitat during January 1- May 15. Previously it was unlawful only to "set" non-compliant fixed gear during that time and place. Also, 322 CMR 4.13 was amended to prohibit the improper marking of fixed gear (with "twin orange markers") that is non-compliant with the specifications for Critical Habitat.

Marine Fisheries Commission Update

The Commission said farewell to longtime Commissioner Kemp Maples, who opted not to seek reappointment after nearly ten years of service. Kemp remained on the Commission through the process of approving the new Director of Marine Fisheries, and was honored at the April MFC business meeting. DMF Director Paul Diodati and MFC Chairman Mark Amorello presented Kemp with a signed and numbered John Rice print as well as a framed copy of Mass. law, Ch. 130 sec. 100A. This statute established joint authority for striped bass between the Director and the Commission and was a subject of discussion throughout Kemp's tenure. We wish Kemp well, and will miss his attention to detail, hard work, and positive outlook.

Rip Cunningham was reappointed to the MFC after a two year hiatus. Rip is looking forward to working with the new MFC and with Paul Diodati at the helm of Marine Fisheries. "I feel as though there are many areas of fisheries management in Massachusetts in which there are still things to accomplish, and I hope my past experience is helpful in resolving some of these issues," he said. Rip, as editor-in-chief of *Saltwater Sportsman*, brings a national, perspective to the table.

The Marine Fisheries Commission is a nine-member board that includes recreational and commercial fishermen (including seafood dealers) and conservationists from various parts of Massachusetts. The MFC was established by the Legislature in 1961, and its members are "qualified in the field of marine fisheries by training and experience." Commissioners are appointed by the Governor to three-year terms, and attend monthly business meetings as well as quarterly public hearings. Regulatory changes and public proposals are approved or disapproved by a majority vote at the Commission's monthly business meetings. Through this process, the members of the Commission are responsible for, in conjunction with the Director, recreational and commercial fisheries management in the Commonwealth.

The current MFC members are: Mark Amorello (Chairman), Bill Adler (Vice-chair), Pat Frontierro (Clerk), Mark Weissman, Mike de Coninck, Vito Calomo and Chuck Casella. There is one vacant position at this time.

By Jeanne Shaw

(Left to right) Director Paul Diodati, MFC Chairman Mark Amorello, Kemp Maples, and Commissioner David Peters

INSIDE...

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DMF NEWS

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DMF receives state and federal funds to conduct research, management and development of the Commonwealth's marine fishery resources. Information in this publication is available in alternative formats.

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Argeo Paul Cellucci, Governor

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